To The Grand Congres end Return. July 19- ag. 7, 1928-Vervour Baily

July 19 1928 Left Washington, 10 x 8 capital Limited at 3 PM for The Gravel Caryon, at siguest of The Carlies of Carnageic Last. To help wills Their Nature Saterentin program. The request was from Dr. John C. Musiam to especially carelate present famos flores with the Grologies ages hours up from the bottom of The Canyon to the top but it is a party The big plan to over to the public a bitter implirstanding of natural history or outdoor knowledge and values through the great nature laboration of our Malional Barles. as I see it may best work will be with the park rangers of Matter guides who will keep going any work we can get started there.

The original competions of DI. CHail Merian when he planned the San Francisco Mountain Exte in 1889 Ma biological siction of the earth involveding the list Zones from Lower Saverau in The Grand Campon up to houseline ad Canadian on top of the rine and and the Through Canadian, Hudsonian and aretic alpins on the Sanfrancesco Peals just south of the carryon of maight of the run, carrying plant and anivallift from The upper edge of the Traperes char to the histir chimaty will apply to The present studies! Infruet we only med to put in practice

and bring out The survey one woode at that truy, and that were graphically published in North Unestear Found No. 3. This facing will be noy trust ad starting point but hape to get plunty of thank illustrations of amusel of plant life in bulation to the znal distribution as well as to their wore appealing intenst to all of up at first hervel ad class angs. lim høping to bring in many of the swall animals alive to be really seen and appreciated by The holdquests ad lourists who swerm in and out of the Park.

as I have washington the day is considered bot, probably 95 but donds are gothning and a Thurder storm will probably cool the air before The capital limited is Comportable, aworth and swell to that after on bours sleep I feel like settling down to a wortenjoyable trips. The country miskill of poal soil is sich in virdust and in places bright with widowners Howers, a pinh Silene is the want abundant at compensors flower along the anilroad where Herdens to book jone wild from

Nhiti Lasies, yarrow od elderberry blandows hold parts of the severy and n plevers a feathery goldensed suggest autumn. Deep orange willwest (hereleparadala) Show up in spots and mony alber flowers are moud liss local. Faither along som Dearlit red trumpet empers quel a nels touch & the duns Viney poliage and a few Rwyth for pie weeds an beginning to blastom in sousting is beautiful in a quiet way but The frieding mason is here al wither the brightness of apring north richness of autimen

The viviles rye and wheat our Cut and shocked and shouldby in the stack or base or bun. Com is knu high & waist high and accessionably a policy on low ground looles promising Fruit Trues, applies of flooding, Vegetables in home gardens are pureally somethy but with warry erostotens. July in The day we ruch the wales of the Polome with the high elwatin ad shightful workiers of The wountains.

July 20 lefter a delicions not night walke it in boathers Lindlewa rushing across the bol country and making fost their mentary for osa 18 hour trift believeen Moshington met alwengo. Got up al had arulatest at Foolack only to find we had changed time af It was only 7. But The country of beautiful and The air delecious. Crops are good ungitation raule Il luse. Winter what not eye are in the about com about as tall as on The costen slope but dach of wary strang Spring what id rolls is waily up, potalous al await potalous look promong and fruit hos

when agricultury supports the hames instead of the farmer barring h upport agriculture. The life gove of this part of the Trip is Upper Serverau, about the Laure as at Washington to a comparison of the floral of fannal elements is not mensey. The main differences are in gedogy ord rail. as we near the southern stored Lotu Muchigan at youry we witer the Land dune forwation with its quat bariety of soil al waisture correlations, appeting plant and annual life. numerous tule al cattail warrhes musteret farms. The security soil was The love store would also be good for cultivated bluebersies if properly might with warsh much, as the lake protects for part.

Tricogo mets you a little farther out on each trips through it. I would like to see a map of the esty in September of 1870 when I first rock clear through it was a covered wagon, as I remember if 20 miles of dup sandy road between rowsof untainly yellow or gray toard houses with wooden sidewalls and no parol struts. It was a long hard days havel at a slow strady pull before we got Through The city to a chewt place to camp on the prairie beyond, with our two covered wagons, my father all wother, two brothers next to The youngest, a yearsold.

Tollay I took the Blue Ling Light seeing has and rocke about 45 miles around the City Boulevards un about 22 bours. Ou hundred years ago Chiego consisted of 4 log eatins truely H. Dearbarne which bod just hun rebuilt after the hudran mesterer of 1812 when the whole settlement was distroyed. In 1871 when the city burned 70 ood prople were wade homeless, about a quester over 3 000 000 estatel growing. Newt & The fuld Museum and spurt an hour in The groups of warmals. Was should by the excellent group of western ell

from the Olympie Utto, collected ne Wrintel by last E. Wukey, and take I can get a photograph I the growp for my Ostgon Rep. The old hull-elle hos The typical short, heavy, with tipped barns J. Gros i. worevilte, very The thors of the hipse of the edos and general characters of the spreis wer resquesable before I got mas wough & read the label. The wounting and setting are up to likelys hert ad would wall a wordigel The Welly wewereaf hall no the finest feature of the museum but contains only a party his wark

Newt next to the and Gallery (Chieres Institute of het) and qualty injoyed the rich collections their. It is such a seitisfaction to find Runbands, gainerboros, Corots, Millets, Troyones, Butous, Troyones, Turners, Constablis, and such pictures instead of the worders stuff I recutly saw at the Ditroit aut Gallery. Then was a lot of wordern work here too but noue of a faddest and disgusting type. The statury is worthy classical od The nove newt waste is by Daniel C. Frunch St. Gaudius and some of Radius but pieces. a full lugth

statue of Linnaens is probably the same as the big brange statue in Linealis Park but the has didn't stop to thus sell it closeby, St. Gaudius Linealis in Linealis Park is fing and stands out in good light which it does not get in The Linealn Mewords in Warhugton. My sarles in Ohreago au The nost uneveres of extursive of any city I know colau will equipped with loters for booting I swining as with play graves Conservalaries, a grood 300, and warry educational and renational features.

July 1928 14 1000 73 Vuly 21, Daylight of Bosworth, Mo. and I watched the fields go by till are Crossed the Missauri River, then got up of finished breakfurt as me pulled into Kantos City at 8 all. Left Komras City at 9. In crossing the Missouri Rion Valley the rich said is evident in the good reops where peoplesly could for med otherwise in the lufirment growth of weeds. Unporterally wort of thefield produce were weeds than erops od wany fulles are quous up to weeds. or used as con pastures of weeds and genss. Ou almost any eftensive area seen the gielt of crops could be none than darbled with intelligent hardling of the land and with list wanted labor than is now in nost cases wasted on it fam ingancering ought not allestive science.

The Messairie Villey bere must be dast to the edged Lower Sonoreu zone Corn is healt high al wort of it turnely out, Wheat al sye are all haurstrof but worthy in the shook. Thereis an unitable advance in The real an over any place we love crossed It varbeur a ring navor eleups al regelation are levereut. Surpowers au alto complowers ord Dadle and susones. Thereau blanson, while morning glaiers and a pew The incompilerors flours but the Hoverive seaon is at its brown ebt. I hard an earleen modowlast Just byal careseng in Missouri Run but bur val get land the western. Thought I heard a didesiased bypose Cossing The Missourin of hand one for sust along the Kaw Vally between

Keinses City o Webila. Early potatoes are repe at being dug orl sached in large fields, Thousands of agens of Them. appeter is in blockow and somet fields bove been aut. Jeoneys hills are comor along Corn is big and bearily could grapeowers load the trees story the now touchs, Collowwoods sel Willows in obundant sel would find thousands of bearing Water is high al weddy in the Caw but no signs of flood Mins queen. There are some five farms Henrel the first western weadowlack between Topeka and Emperica and lots of them faither along. From Hutchinson west the country is higher and dryer I amps an largely grad this your as theteles bear plinting rain.

With bitter cretture and less weeds They would be twice as good. Sunflowers are abundant but rather aisful weeds as they furnish rich seeds for slock and hids and mice. Even the trubb weeds have a use for they furnish a pervite food for birds and mice, and would probably be void for milage or work to yield a good seedsop.

Cool and delightful after the rain.

Vuly 22. Swelay I suffort. Saylight on the high most earthy man Ratou, h.Mg, al I got up as our pulbelists Las Veyas at 6:70 am. There has been lots of rain of the country is grossy, the jumper of wet purtues are fall ord greek and well someled Crops are growing - lots of will dry form patelus and Then are wany Howess in blockson. Crossed the Pieas Proy of Alka and lord a good view of The old Spraints verseon of San Miguel Just below. not much eurover on the routh rile of I leas Palay and Translos Plakes Does the summent of Glowella and hours to Lawy and wito the Rio Grands Valley. Dry od dusty outside but not uncomfortable - The will ained California himilia. Reached Winslow of adamsura

July 23. Lift Williams for the Grand Camper about a UM and saw the sum sixy on The desert and Seur Francisco MW. Watched the sange for life goves Prairie dogs etc- all The way a arrived at the edge of the Campon of 8 all. found a soom usewed for me at the El lovar Holy and was met by Dr. Fred Kight al Edwin MG Keek. Mr. Lilletson, park Superntundent took Sr. Wright od Glev Sturdioant, The park naturatist, and west to Havasupi Point where we bad a wordreful view of that part of the carryin as we lemeled as the rem. The campon is here Comparatively naseon of deep all has intricate and bedown up by side carmons of is very imprissing from its shier diffth of vorstness as well as its glowing colors of char out geologiest layers of wonderful caroway. On the way the road runs Through Postue Wash, a long open roughrush at salt bruils stalley that would made an ideal antilope partury and bas The hist of autologue foods, Thry opins of sorgebrush, atriphy comeseus, Eurotia lavata, surlat opieus of Chrysothamus of nuverous

Anall planets of granses. Eler open Jumper at Wattries prest borders both sides of afford shade at sheller. Musicis no oper water but a drawage tank of cisture supply the ranger station of would water a few autiloft at later a larger tank could be addelse. The conditions would be ideal for autilops while thouse down in The Indian Gardins an alwart tieing of the extreme heat, parting briolatly all the time during the hat of the day, Saw a few laws due that hang around the latel El Tovas of

ad eat the flowers in the bottle garden but are more allactive Wash all the flowers. They were brought over from the north side of the campor and are toing well berg. If the range cattle new punitted to eat up wery green Thing along this run of the Park Could be eliminated we could have duer all autilops all Through This reautiful Gillow sing of mut sine forests. and some day lit will some to be. alto mountain they would come up over the rown of be a welcome part of the Path faring.

July 24 Helpied the boys set out traps od wale up okius to get them started on a collection of ham als, brids and repatily which The need ben. Jave a brief talk of the betty museum building at youapi Point on the annuals of the Campan ad another in The eving at the camp fire.

July 25 - Start of across the Camper with Suff. Fillitson, his wife and two children, the Dean al Jean, ad glin Sturdvauf. on mule book with a pook mul to carry our extra loggoge. Sturderent of I started ahead to we could stop all hunt higards allret plants but were overtaken byen we washed the bottom by the west of the party. Riached the Phanton Rauch mas worth of Dught angel bruk about 5; 70 ad staid over night. Set hafts ed Rupared opremens in every of bufore we went to bed.

It seemed watered to again by in the hat lower soveran zone with the surgent other of Backers al the This stade of merquits ad to slup on top of the Covers on a rerected porch. The timperature to day was only 106 in the stade but bot been 116 This seumes. The camper does not cool of soon of night of is satted fumace tily. I felt the heat wou than I used to al had to be caused not to over exert myself. Could not drivel everyth wahr to cool my enging, but later acquired the bobit.

Found in interesting lot of ligards in the campor undoding one that I never new before with a bounded laif lika ghibker. IT may be the young of the Chridiawalla but is mothy ud det of very different stopp. Could not find a chrickanals The they are rough to by pushy Comon. Collard ligards were Como, also Cuenospolorus, Serbjærus wagistur, at surred tittly Doclofours Mutate of Holfrookias. Got all we Could for spremmes of will

Luby 24 - Followed up Bright angel tract Cruel Through a deep Carryon for some unity, they out wite nou open valley, Lunched at Ribbor Falls, a heautiful spot al continued up the Aphrolist new trail past Roasing openings to the top at Bright augul Point of the quat haty, called the Lodge, on the North Run Was delighted to find abundan of astrya knowltoni por oom nulis along The haif operately Rousing Skrings of got plotographe

got our dinner as early as passible at the both of them went out in a big can to su The dur, along the wood worth about 18 mily through The open valley known as The VT Ranchy Found bots of dus ad Countrel soughly from the car 1/2 on the way out but did vot count mear all of them, they come into the long weadows and open valley to first a Timy wild cloves That grows in qual abustance al obould be introduced Where ever dues are raised. They were just obgging it up by

werttfull viel bord come in from the forest all around. Were in brushes, sometimes a dozen or 50 buds togethy on a lot of does of purus or all might up or scalling out. The fuels bad full grown author the velocit of ) never saw sor warmy sets of huge authers hiper. It seemed as if ball the dues lots of spotted prous of all booked plump at sluk and Jappy and they were not assind of as. I desen off

heads and gage as the au went by on 50 ful any with about as much milinest as if we well a padding car. Liw ran muless we trothe the hen to get them out of the road. It was a sight the thrill the soul of amjore but a hunter Caught two poreupines on the nay all brought a young our back & The botel to show The peakell. Marly froze as Vocat without a bad ad bad to twen of my cout collar of tua buskereling sweater males rues coat.

The whole drive except the Hart was through puri Caundray gone abour 8500 ful ad it full good tigut bouch to the loty arrowg they yellow pines cet 8/00 fut and plut, the warmen ais come up out of the campy Slight will all the covers over me a mee warm log Cation while to the both and the sorreupene we brought back staid quietly behind the story in on corner of our room.

July 24. Went out to the Ranger Station sel Let traps for poelect gofthus, stot a Christmuk orl word not at al red oquied al eaught 3 Callospermophilus and me haps set last night by flosh light caught 3 Perompreus m. enfiner, a Meotoma lysida pod a Eutamins dossalis às utapeausis. In afternoon went with the mad ranger, Frank Wissess to Far View Point gons & wills east on The sun of Marble Carmyon where I could look all over! the Painty Disert Country across Marble Campon, up the Carmyon of the Little Colorecolo sel borr a good view of Marajo Mountain The Listance.

Got some photographs of Ed. Laws of Ranob, much the Park rangers, and formed he was a tapidement ad knows a lot of The annuals He told med about 25 monutain shop done on this side of the Campon below here that he bad seen læst wruter. Got Charles Merreaun ad Jelu E. Sturdivant to make up spiemers and I worked with them showing Them all I could de we completel a mes box full to tale back to The ather seds 9 the In eving gave a tall in

teeture room om the animal life of the campon and had the percupine on a tople for illustration. He behaved niety del allowed The people to stroke his pruhead very quilly. There were probably So people in The audience. In woring went out well Charles Murran an a natur walls with a dozen os 15 people and be gave Them a lot of good inforwation. He is a fine by littly more enthusiasm would waly his talks more inspering.

July 27. - Gothered a few worst opening and started back across the campon about 10 oeloek of lunched mas the overlanging hodge before walling Housing String, Reached Phantom Ranch about 5 PM of Raid all might. Carrotta roch rattles about hru fut long mas our tent ad put it in a gumey Jack to be stolographed in The worning. Seratoling my fugus on one of its buth as I bet god if in the soch poison in al no noutestions

The bod secutotufit on a pin.
Swelved the blood out after supper put a little Lodins on it to privat infection of next noring could searchy find the place. Got some fing live spreums of the Cremoclophonis hissilatus Selloporus Stader wajesty at the power bouse. I wow they snared them for me with a moose an a piohpole. Sit 9 traps after supper of hype I want to had had 2 Motora lipide man hip and 3 sprews of Peromyrous of a Ruthrodanlowys in The others. Most a very bot day.

July 28: Got a fairly early start up the south side of the Campon, All taling woring sidnes of The sattleswale of Trying & get a church-walla. Cause back by way of Indian Garden where the autilops are but Law only 2, The old huch of doe. The not were off in The brush but these two were eating rolled backy in The stock by The rangers bouse and were so tame they would let me bet there and would not go out in the lot sun & be pholographia

The does very thing of not in good shape but the buch is fine and swooth and plump, Both were feeling the heat badly al pareting all the time in the cooles stade they could find. There is abundance of food for them, both green and dry all grass and browse They and pluty of grain. They boot eaten all the books off a large sase bush as bigh as they Can- wach all all food of the barrs of Reach and apple hus. admining of the vality bushes. Short dry grass, Plantago, Fillaree, and wany littly green grass along The works adges are available as well as htlight caucieus, Emotia chrysothamas od othes browse plants.

Reached El bovar about 4 PM tired but with a great fuling of. accomplishment and full of the vasture ad wonders of the graved Conyon. Took a both of got into chan clothes of ristig alafter supper gave a talk on Carlobod Cavern with a set of shieles at the hotel. They went down to the Camps fire and heard pract of a talk on Geology by Sturdwant. Mexiday. hulfred walter up obsives and stuffed The raille smake with sound. We then coolered and all some of it and all agreed that it was good

July 38. Helped walle up spreumens and wisolf of ristled wanty the day. Gave a talk on Callhand Covern in evening at the fatel with a set of lawlery stides found there and not being used. Then went down to Camp fire and beard part of a tall on The geology of The Carmyon by Sturdevant Had an easy day and ful met ustig as. At // AM Zie. flas Davis al his daughter cal party of a dozener to came to the yarapi Point musium where they were geven talks on The geology of the anyon by Sturdward and Morker and Thus I talked to them on the animal life of the campon - of gave the Dietetanys Laughter a bositood that I had pieled up by the trail at lewell in The El Town Hotel The Grentary Called me over to his table where I unjoyed a delightful visit between him ad his daughter. The bool the boshtond in a proper boy sol when last seen on the train and catoling

July 36, Whole belles of water ad woond zom waps ad got nut muj lantisy stides of ed en evening gave a tallen the animal life of the years Carryon Country, illustration it with life governap, types of begetation of the 4 gones present and Then showing nort of the warnals of the region. Hoda good betuy ball in thy El Lover, a good lawtery and wast appriliating andrence, Hool to stay marly an bour after the liebury to talk of them the hest I could.

aug. 1 - Staited for Flagstlaff with Superintendent Tillitoera and his daughter gone and Eddy MC Kue by way of The Campered the little Colorado, the Converou ranch al paintry Disert, then buel around the east side of Dem Francesco Monutains, about 85 miles with fauly good wood norty The way. found the gove was as published - 1889 appropriately correct but was able to drying The Lower Lororand the Little totorado valley word difinitely as not including all below the edged withing to the lower vally of the ring.

The lower Soveran of The little Colorado Valley is molicated by Coliceppe savasissing, Thamussura wortenum, agave utahwsis, queea arquelifolies with a two poot hunk as grows Lower part of grand Campon, litriplex tiles corresems but the same as grous The Grand Carryon ad an Mahour Disert, Echivercaethes beauti, Ceretus engelwani, Opsewtig engelmanni, Operatia clavota; very spiny opuntion with fine white spines is in grand Canyon atriphix confertifolia, Bigelovia of 3 sprices, Gutherrizea of two prices. By Crotophytus baileyi, scrloperus magistu, amopenylik Circumstations Howarys perpullidus.

Junerally the gave is very base of
somewhat infied with hyper touran spicies Guy. 2. Proj. H.S. Colton in charged the Webrological of general museum must Flagstaff took his big Buch Car of took Eddy M2 Ker sel we Up Dan Francisco Manulain on The new was now completel always to the top of assis Peak, a wonderful Trips for scenery of life gone studies. Mcku went to the top of the peak and we went will above timberlive. Alas The word winds up The south side of the wountain of around into the old crater east of the next peak south of agassiz al Then across The east force of agassin about timberling onto the radelle to

the north and book along The keak. The grade is easy ad wordby good, the last nights beary lain bod salled a lot gack Found the life gone was appropriately Correct but wall a few slight additions to it, adding work Canadian quen & the ME Hopes of Elden Mountain consisting Hodronian over The raddles between The Topeales of the old exalty ring. Our bower edged domplas apener is also the lower edged lisken ed Pinus flexiles of com well by napped as Cavadian while the spread of fit your above is namely Carradian with the dway thinks

of fortail ping and Preca englinamis
and abies augunea made the Andronian They seems to be no old swow on the peaks this summer whatsom the UE. side of Humphary Pak where we could not see but a lot of fush snow or sweall haif from last mights storm is still lying on cold upper stopes Formed Callonpernophilus of Enlamias curenisablis ad Samus up to trimberling and abundances Clarks Crows, Juneacs and having brids. Two barrel tribed pignous sweft close to as over any the saddles at timbuling.

Came back down to Proplattons beautiful bome on The wesa about Hagistaff and bod a delicious hunch with the family, My. Collen al a 14 year old sou. Went Thisough Collow Colonatry where he is expermenting with biked white roll, survivey The front put at birth of studying the effects of hiped life on houses and nurcles of the rats Through numerons gurerations, la bosq will equipped laboratory with an assistant od is doing really careful scientifice works. alto his in charge of the museum at Hagstaff.

Mrs. Colton is an artist of bus done beautiful paintings of the Grand Campon, Painted Disert and warmy scener of This region of has a ranchable studio of her our disigna, till an Indian adole with all north light. Their windows in The louse an all pietury wurdows with views of the San Francisco Peales or out over the valley ad big feller ping forest, a wort intuiting pain of with a boy of quiet but original

Mug. 3 - Left Hagstaff for bown at 8:10 all Santa L., Calif. Limited. Good of pleasant ofter the rains od not bot all day, even in The Rio Gravele Pally at Isliter of alfugue where we amond at le:15 al best at 7 PM. Thre las been considuable sain all along of grass is good when not over stocked set over grazied. The Little Colprado was over its prules day before yesterday at the water a fort slup in the both at Winstow. Today it is down Da narrow stream - one side of the feel of the rever.

Aug. 4 - a cold night over the Ration Pass and I wishig! I boda seems blanket over me. Got up at La Junta in a leautiful bright world with fush green all around out of doars. It has been raming ad is a good pear for stock. faither east crops are good al éastien Kansas is booning It is pretty rainty and some crops are spailed.
Renebed Kansas City ofter a cool and comportable day aug. 5 - Reached Chierap at 11all, Cool al Cloudy, Lytt 12:45.

Aug. 4. arrived Lausing, Mils.
7 PM od went to Downing Hatel for the xinglet. Mug. 7 - Out to North Umeneau Fur farm to inspect pours and cages when unerlisals are being placed for bruding purpases, wade exerciss whuls al suggested some Changes in mettods of barrelling The animals The lake where a fair stock of musterats was found last spring contains numerous snapping turtles ad a a few nink are ranging aunof It misely of the enclosure, of

the musbrats are reported vot very summerous. Left for Westingter 7:45 PM My. 7. arrived Washington 10 PM.